





## **Leave No Trace**

#### Plan Ahead and Prepare

#### All hikers must obtain a backcountry permit before starting their hike. Be prepared to remain on itinerary at all times.

Know your route. Take note of elevation loss and gain, mileages, water sources and campsites.

Be prepared to carry up to 4 liters of water, depending on the trail and time of year. Keep your pack light but bring gear that suits the weather conditions. Pack weight should not be more than 15-20% of your body weight.

Watch and review the Hiking Grand Canyon, Prepare for Backpacking video, available at www.nps.gov/grca and upon request.

#### **Dispose of Waste Properly**

Pack out all trash. Trash includes nut shells, fruit peels, dropped food, cigarette butts

Use toilets where available. If you are not near a toilet, walk 75 steps off the trail and dig a 4-6 inch hole. Bury your waste and pack out your toilet paper. Do not bury

Everything you pack in you must pack out. Do not leave any gear, food, or trash behind.

#### **Leave What You Find**

Leave the wildflowers. Leave the rocks. Leave everything for the next hiker to enjoy.

#### **Respect Wildlife**

Keep your distance and do not leave your food or pack unattended.

#### Travel and Camp on Durable Surfaces

## **Hike Smart**

#### Timing is Everything During hot weather, start your hike well before dawn or after 4:00 p.m. During colder weather, remember that daylight hours are short. Plan accordingly.

#### **Keep Cool: Summer Hiking**

Start your hike before sunrise and rest in the shade between 10:00 a.m. and 4:00 p.m. Hike wet to stay cool and wear a wide brimmed hat and sunscreen.

#### **Keep Warm: Winter Hiking**

Dress in layers. Hiking will raise your body temperature, but you will feel the chill when you stop to rest.

Cover your extremities. Wear a warm hat, gloves and wool socks. Keep extra dry clothes on hand.

Eat often to keep your body warm and fueled.

#### **Balance Food and Water Intake**

Eat twice as much as normal, particularly salty foods.

Drink throughout the day. Do not wait until you feel thirsty before you drink. Check your urine. You should be urinating regularly, and the color should be pale

yellow, not clear or dark.

#### **Restore Your Energy** Hike at a pace that allows conversation.

If you start to feel nauseated, dizzy, or disoriented, immediately rest, eat and drink until you feel 100% better.



# NATIONAL PLANK SERVICE

## Spring and Autumn March and April, October and November

#### What to Expect

in cooler temperatures.

Average temperatures at the river: high 75° F/22° C, low 50° F/10° C. Average temperature at the rim: high 52° F/11° C, low 27° F/-3° C. High winds in March and April.

#### **Spring and Autumn Hiking Tips**

Spring and autumn weather can be unpredictable. Be prepared for all weather conditions.

Be prepared for lingering ice in the spring and early snows in autumn. Check conditions and wear crampons if necessary.

Check on seasonal water availability along the Bright Angel and North Kaibab Trails. Seasonal water is generally available May-September. Windy days can leave you quickly dehydrated. Drink plenty of water even

Remember that hypothermia can occur in 50° F/10° C weather and heat illness in 80° F/27° C weather. Listen to your body, check weather forecasts, and plan appropriately.

#### **Summer** May through September

#### What to Expect

Average temperatures at the river: high 106° F/38° C, low 82° F/26° C. Average temperatures at the rim: high 75° F/24° C, low 44° F/7° C.

Hot and mostly dry in May and September.

Very hot and dry in June.

Hot with rain and thunderstorms in July and August.

#### **Summer Hiking Tips**

The inner canyon can be dangerously hot. Start before dawn, after 4:00 p.m., or hike at night to beat the heat.

Remember that on-trail and in-sun temperatures are 15-20° degrees F warmer than the forecasted temperatures. Some summer days can reach up to 130° F/54° C in the full sun.

Wear light colored, loose fitting cotton clothing. Cotton retains moisture and keeps you cooler.

Hike wet. Soak down at every opportunity. Carry a wet shirt in a plastic bag for a refreshing change mid-hike.

Cut weight. Forgo a sleeping bag for a light blanket or sheet; pack ready-to-eat foods and leave the stove behind.

Beware of lightning and flash floods during summer thunderstorms.

Be aware of the signs and symptoms of heat illness. Watch for headaches, dizziness, nausea, irritability, cramping and decreased urine output.

## **Winter December through February**

#### What to Expect

Average temperatures at the river: high 55° F/12° C, low 35° F/2° C. Average temperatures at the rim: high 41° F/5° C, low 19° F/-7° C Cold and wet with snow storms on the rim and rain in the canyon.

#### **Winter Hiking Tips**

Short days; long, cold nights.

Wear crampons or other ice traction devices on your boots to hike down

Wear synthetic or wool layers to wick moisture away from your skin and keep you warm, even when wet.

Keep a set of dry clothes and socks handy in case you get wet and chilled. Your body needs fuel to keep you warm. Eat nourishing foods often. Bring warming foods like soups, tea, cocoa and oatmeal.

Bring appropriate gear. Pack waterproof layers, a tent, stove and cold weather sleeping bag.

Remember that wind chill can make a cool day bitterly cold. Wear windproof layers on windy days.

Be aware of the signs and symptoms of hypothermia. Symptoms include uncontrolled shivering, confusion and exhaustion, even after rest.

### **Taking Care of the Canyon**

#### **Before You Hit the Trail...**

Check last minute weather forecast and adjust plans accordingly. Everyone should feel well and ready for the hike. Anyone not feeling well should postpone their hike.

Recheck that you packed all prescription medications, first aid kit, and backup water purification.

Leave your itinerary with a family member or friend who will notice if you are overdue.

Hydrate, eat a good meal and get a good night's sleep.

Cottonwood Campground to Ribbon Falls:

Trailhead to Cottonwood Campground:

#### While You are at Camp...

1.6 mi / 2.6 km

7.2 mi / 11.6 km

6.8 mi / 10.9 km

14 mi / 22.5 km

7.0 mi / 11.3 km

9.5 mi / 15.3 km

Choose your campsite. Sites are first-come, first-serve. Group sites are reserved for parties of 7 or more hikers.

Immediately place all food, toiletries and plastics in the food storage cans located at each campsite. Keep the lids locked any time you cannot closely monitor and guard your food.

Hang your backcountry permit in a visible location. Attach the permit to your tent, picnic table, or backpack. Leave your permit at your site during your entire stay at the campground.

Do not cook on the picnic tables. Boiling water and spills can lead to painful burns.

#### When You Leave Camp...

Clean up your site. Do not leave any trash, gear, or extra food. Check your site for microtrash. Look for dropped crumbs, bandages, twist ties, fruit peels, etc.

Remove everything from the food storage cans and place them upside down on the picnic table. This prevents small animals from getting trapped in the food storage cans.

If you are getting an early start, remember to maintain a quiet camp and let your fellow campers continue to sleep.

Check the campground bulletin boards for any trail and water updates. Attach your backcountry permit to your backpack for your hike out.

## Winter Storm and Zoroaster Temple MICHAEL SCHRAMM Hiking Map: North Kaibab, South Kaibab, and Bright Angel Trails

# North Kaibab Trail North Kaibab Trailhead: EL. 8241 ft / 2512 m Elevation Change Mileage Change Trailhead to Supai Tunnel: 1441 ft / 439 m 1.7 mi / 2.5 km Supai Tunnel to Roaring Springs: 1580 ft / 482 m 3.0 mi / 4.8 km Roaring Springs to Pumphouse Residence: 620 ft / 189 m 0.7 mi / 1.1 km Pumphouse Residence to Cottonwood Campground: 520 ft / 158 m 1.4 mi / 2.3 km

360 ft / 110 m

1600 ft / 488 m

4161 ft / 1268 m

4780 ft / 1457 m

4380 ft / 1335 m

Trailhead to Bright Angel Campground: 5761 ft / 1756 m

Be Prepared: Highway 67 to North Rim open from May 15 to first heavy snow.

Cottonwood Campground to Bright Angel Campground:

## South Kaibab Trail

South Kaibab Trailhead: EL. 7260 ft / 2213 m

Elevation Change Mileage Change

Trailhead to Cedar Ridge: 1140 ft / 347 m 1.5 mi / 2.4 km
Cedar Ridge to Skeleton Point: 900 ft / 274 m 1.5 mi / 2.4 km
Skeleton Point to Tip Off: 1220 ft / 372 m 1.4 mi / 2.3 km
Tip Off to Bright Angel Campground: 1520 ft / 463 m 2.6 mi / 4.2 km

Be Prepared: No Water on South Kaibab Trail.

Trailhead to Bright Angel Campground:

Trailhead to Bright Angel Campground:

#### **Bright Angel Trail**

Bright Angel Trailhead: EL. 6860 ft / 2093 m Elevation Change Mileage Change Trailhead to 1 ½ Mile Resthouse: 1131 ft / 345 m 1.6 mi / 2. km 1 ½ Mile Resthouse to 3 Mile Resthouse: 981 ft / 299 m 1.5 mi / 2.4 km 3 Mile Resthouse to Indian Garden Campground: 948 ft / 289 m 1.7 mi / 2.7 km Trailhead to Indian Garden Campground: 3060 ft / 933 m 4.9 mi / 7.9 km Indian Garden Campground to River Resthouse: 1320 ft / 402 m 3.2 mi / 5.2 km River Resthouse to Bright Angel Campground: 0 ft / 0 m 1.5 mi / 2.4 km

Be Prepared: 1 ½ Mile and 3 Mile Resthouses are seasonal water sources. Check availability.



